Staff Summary Report

Tempe

Council Meeting Date: 06-23-04 **Agenda Item Number: 3**

SUBJECT: This is the introduction and first public hearing to approve Ordinance No. 2004.28 approving the Design and Construction Agreement with Valley Metro Rail, Inc. The second public hearing is set for July 22, 2004.

DOCUMENT NAME: 20040623pwjsm01 **TRANSPORTATION PLANNING (1101-01)** Ordinance No. 2004.28

SUPPORTING DOCS: Yes.

COMMENTS: Approval to enter into a Design and Construction Agreement with Valley Metro Rail, Inc. The Federal Transit Administration requires this cooperative agreement to approve federal funding of the light rail project. This Agreement specifically defines the design and construction of the light rail project and delineates roles and responsibilities of both Valley Metro Rail and the City of Tempe. It is a formal documentation of the cooperation and daily participation that has occurred between Valley Metro Rail and affected City departments since the project's inception. The Design and Construction Agreement is specific to the Central Phoenix/East Valley segment and ends one year after construction is completed.

PREPARED BY: Jyme Sue McLaren, LRT Project Manager (350-8803)

REVIEWED BY: Glenn Kephart, Public Works Manager (350-8205)

LEGAL REVIEW BY: **PENDING**

FISCAL NOTE: **NA**

RECOMMENDATION: Staff recommends adoption of Ordinance No. 2004.28 authorizing approval of the Design and Construction Agreement with Valley Metro Rail, Inc.

ADDITIONAL INFO:

ORDINANCE NO. 2004.28

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, APPROVING THE DESIGN AND CONSTRUCTION AGREEMENT BETWEEN THE CITY AND VALLEY METRO RAIL, INC.

WHEREAS, VMR is presently designing and constructing the Central Phoenix/East Valley Light Rail Transit Project (the "Project") which will be a new light rail system in the Central Phoenix, and East Valley area as illustrated in Exhibit A; and,

WHEREAS, this Agreement defines the roles, responsibilities, commitments, obligations, and expectations for VMR and Tempe as they relate to the Project; and,

WHEREAS, the By-Laws of VMR defines many of the obligations of the members of the VMR; and

WHEREAS, Tempe is a member of VMR; and,

WHEREAS, VMR will execute similar but separate Agreements with the City of Mesa, and the City of Phoenix; and,

WHEREAS, independent Operations and Maintenance Agreements will be formed with the City of Tempe, the City of Phoenix, and the City of Mesa; and,

WHEREAS, the Public Way Use Agreement for the non-exclusive use of Occupied Tempe Property for the System within the City is contained within this document, Exhibit B; and,

WHEREAS, the Maricopa Association of Governments, a metropolitan planning organization, has adopted the alignment, as set forth in Exhibit A attached hereto, as part of its long range transportation plan; and

WHEREAS, the Project received environmental clearance in a Record of Decision issued by the Federal Transit Administration on January 24, 2003; and

WHEREAS, the project received Final Decision Approval in July 2003; and

WHEREAS, the Project will be funded through a combination of federal and local funds; and,

WHEREAS, VMR has no jurisdiction over any right of way including Occupied Tempe Property over which the Project will be constructed and operated; and

WHEREAS, VMR and Tempe desire to establish an agreement to define the Parties' expectations for the design and construction of the Project; and,

WHEREAS, the City of Phoenix will function as the Grantee of the Federal Transit Administration for the federal funding;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TEMPE ARIZONA, as follows:

Section 1. That the City of Tempe hereby approves the Design and Construction Agreement between the City and Valley Metro Rail, Inc.

Section 2. That the Mayor is authorized to execute any documents that may be necessary to carry out the purpose of this ordinance.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, this _____ day of _____, 2004.

_____
MAYOR

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

DESIGN AND CONSTRUCTION AGREEMENT

FOR THE

CENTRAL PHOENIX / EAST VALLEY

LIGHT RAIL TRANSIT PROJECT

BY AND BETWEEN

VALLEY METRO RAIL, INC

AND THE

CITY OF TEMPE

June 2004

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THIS COOPERATIVE AGREEMENT REGARDING THE DESIGN AND CONSTRUCTION OF THE CENTRAL PHOENIX / EAST VALLEY LIGHT RAIL TRANSIT PROJECT (the "Agreement") dated _____, day of _____, 2004 by and among VALLEY METRO RAIL, INC., a corporation formed under the Arizona Nonprofit Corporation Act (A.R.S. § 10-3101 et seq.) by certain cities within Maricopa County utilizing the authority granted under A.R.S. § 11-952 ("VMR"), and the CITY OF TEMPE CORPORATION, a municipal corporation duly organized and existing under the laws of the State of Arizona ("Tempe" or "City").

WITNESSETH:

WHEREAS, VMR is presently designing and constructing the Central Phoenix / East Valley Light Rail Transit Project (the "Project") which will be a new light rail system in the Central Phoenix, and East Valley area as illustrated in Exhibit A; and,

WHEREAS, this Agreement defines the roles, responsibilities, commitments, obligations, and expectations for VMR and Tempe as they relate to the Project; and,

WHEREAS, the By-Laws of VMR defines many of the obligations of the members of the VMR; and,

WHEREAS, Tempe is a member of VMR; and,

WHEREAS, VMR will execute similar but separate Agreements with the City of Mesa, and the City of Phoenix; and,

WHEREAS, independent Operations and Maintenance Agreements will be formed with the City of Tempe, the City of Phoenix, and the City of Mesa; and,

WHEREAS, the Public Way Use Agreement for the non-exclusive use of Occupied Tempe Property for the System within the City is contained within this document, Exhibit B; and,

WHEREAS, the Maricopa Association of Governments, a metropolitan planning organization, has adopted the alignment, as set forth in Exhibit A attached hereto, as part of its long range transportation plan; and,

WHEREAS, the Project received environmental clearance in a Record of Decision issued by the Federal Transit Administration on January 24, 2003; and,

WHEREAS, the Project received Final Design Approval in July 2003; and,

WHEREAS, the Project will be funded through a combination of federal and local funds; and,

WHEREAS, VMR has no jurisdiction over any right of way including Occupied Tempe Property over which the Project will be constructed and operated; and,

WHEREAS, VMR and Tempe desire to establish an agreement to define the Parties' expectations for the design and construction of the Project; and,

WHEREAS, the City of Phoenix will function as the Grantee of the Federal Transit Administration for the federal funding; NOW, THEREFORE, IT IS HEREBY AGREED, by and between the Parties, as follows:

SECTION 1.0 DEFINITIONS

"ADOT" means the Arizona Department of Transportation, an agency of the State of Arizona.

"ADOT Right of Way" means all right-of-way property for the Project that is under the jurisdiction of ADOT.

"Agreement" means the Cooperative Agreement regarding the design and construction of the Project or "Design and Construction Agreement".

"Articles" means the Articles of Incorporation for VMR.

"ASU" means Arizona State University, an agency of the State of Arizona.

"Betterment" means any change in the Project requested by any Stakeholder that is included in the Contract Documents that improves a portion of the Project beyond

the minimum requirements and which results in a net increase to the total Project Cost; provided however, that the term Betterment shall not include: (i) any change which is required to bring a facility into compliance with any then-applicable code provision or other applicable standard; (ii) any measures taken to mitigate environmental impacts identified in the Record of Decision or other environmental mitigation measures required by law; (iii) any repair or replacement of an existing facility damaged or disturbed as a result of the Project; (iv) any change reasonably required to implement any part of the Contract Documents or to implement the completed properly or in a manner consistent with the Contract Documents; or (v) any change necessary to give effect to the reasonably discernable intent of the Stakeholders.

"Board of Directors" or "Board" means the governing body of Valley Metro Rail, Inc as described in Exhibit E.

"By-Laws" means VMR's By-Laws established pursuant to the Articles of Incorporation.

"City" or "Tempe" means the City of Tempe, a municipal corporation duly organized and existing under the laws of the State of Arizona.

"Concurrent Project" means any project, constructed together with the Project and incorporated into the Contract Documents but not as a betterment, and shall not include: (i) any change which is required to bring a facility into compliance with any then-applicable code provision or other applicable standard; (ii) any measures taken to mitigate environmental impacts identified in the Record of Decision or other environmental mitigation measures required by law; (iii) any repair or replacement of an existing facility damaged or disturbed as a result of the Project; (iv) any change reasonably required to implement any part of the Contract Documents or to implement the completed Project properly or in a manner consistent with the Contract Documents;

or (v) any change necessary to give effect to the reasonably discernable intent of the Stakeholders.

"Contract" means any contract(s) VMR enters into for the design, and construction of the Project, or any procurement of equipment for the Project including, without limitation, any change order to the Contracts.

"Contract Documents" means the documents prepared for the Contractor which include the Contract Agreement, Invitation for Bids with Addenda, General Provisions, Special Provisions, Plans, Specifications, Contractor's Bid including Executed Bid Forms and Attachments, and any Change Orders pursuant thereto.

"Contractor" means any contractor who executes a Contract with VMR for the design or construction of the Project, or for supplying equipment, services, materials, or supplies for the Project or portion thereof.

"COP" means the City of Phoenix, a municipal corporation duly organized and existing under the laws of the State of Arizona.

"Design and Construction Miles" means the number of miles (# of miles) of LRT track that are within the City's boundaries for which design or construction work is to be performed.

"Design and Construction Cost" means the combined expenditure of regional and local funds for which the City is responsible.

"Effective Date" means a date that is 30-days after the adoption of the Agreement by the Tempe City Council and signed by VMR.

"Local Costs" means costs allocated to the City for non-regional Project elements within City boundaries. Costs not classified as Regional are deemed to be local.

"LRT" means light rail transit.

"LRV" means light rail vehicle.

"Member Agreement" means the Articles, the By-Laws, and the Joint Powers Agreement together under and enforced by A.R.S. Section 10-3732 for VMR.

"Mesa" means the City of Mesa, a municipal corporation in the State of Arizona.

"Occupied Tempe Property" means all real property owned or controlled by Tempe that is to be physically occupied by System improvements in accordance the *Public Way Use Agreement for the Central Phoenix/East Valley Light Rail Transit Project* by and between VMR and Tempe.

"Party" means VMR or the City and "Parties" means both entities collectively, as governed by the context in which such word is used.

"Plans and Specifications" means the plans and specifications required with respect to the Project, which detail the work.

"Project" means the design and construction of the Central Phoenix/East Valley Light Rail Transit Project as defined by the Contract Documents and this Agreement which will operate as a "system" once installed.

"Project Alignment" means the route light rail will be implemented as part of the Project, see Exhibit A.

"Project Contingency" means those funds assigned to each contract for unforeseen situations.

"Project Cost" means the total of all line item costs identified in the Project's Full Funding Grant Agreement budget.

"Project Reserve" means those funds established for the Project as a whole for unforeseen situations exceeding Project Contingency limits.

"Project Submittals" means all design drawings, shop drawings, product data, test data, specifications, design and construction submittals, construction schedules, fabrication drawings, erection drawings or similar documents which are produced by or on behalf of VMR during the design and construction of the Project, and which relate to

the Plans and Specifications or otherwise affect the interests of Tempe under this Agreement.

"Regional Costs" are the costs allocated to Tempe, COP, and Mesa including but not limited to, light rail vehicles, the maintenance and storage facility, operations control center, bridge structures, regional park and rides, and Project administration. Allocation is based on Design and Construction Miles within a Stakeholder's boundaries.

"Stakeholder" means Tempe, Mesa, or COP, and "Stakeholders" means two or more of such entities collectively, as governed by the context in which such word is used.

"System" means the approximately 20-mile light rail transportation system to be owned, operated, and maintained by VMR within the System Alignment, including all tracks, stations, park and rides, light rail vehicles, conduits, electrical lines, traction power poles, traction power substations, cross-span wires, LRT traffic equipment, stray current protection equipment, and other functionally related and appurtenant equipment and facilities.

"Tempe" means the City of Tempe, a municipal corporation in the State of Arizona.

"VMR" means Valley Metro Rail, Inc., a non-profit corporation formed under the Arizona Nonprofit Corporation Act (A.R.S. § 10-3101 et seq.) by certain cities within Maricopa County utilizing the authority granted under A.R.S. § 11-952.

SECTION 2.0 PURPOSE

The Project represents a major undertaking. VMR will manage and control the Project on behalf of the Stakeholders. However, in order for VMR to appropriately discharge its obligations to the Stakeholders, VMR must ensure that there is concurrence, coordination, and participation by and among each Stakeholder, careful

management of financial resources, and strict adherence to the design and construction budgets and schedules. The interests of the Stakeholders with respect to the Project will not always coincide. Therefore, the Stakeholders have agreed to enter into individual Design and Construction Agreements for the following primary purposes:

A. To identify, document, and agree upon the interests and objectives of each Stakeholder with respect to the Project and set forth the standard requirements of each Stakeholder with respect to the Project. Each Agreement shall constitute the guiding document governing the Project with respect to each Stakeholder.

B. To describe the respective roles, responsibilities, obligations, and expectations each Party has in connection with the Project and to establish methods and means of working together and cooperating to achieve the goals and objectives identified herein.

C. To establish the mechanisms for resolving any disputes among the Parties.

D. To document Stakeholder requirements so a Project Cost can be developed as the baseline.

E. To identify the allocation of Project Costs including Betterments among Stakeholders.

SECTION 3.0 TERM

Beginning on the Effective Date, this Agreement shall be operative for a term of one year past the initiation of revenue service. The Parties do not intend that the term of this Agreement shall exceed any limitation imposed by law, including without limitation the Laws of Arizona, and agree to comply with any applicable requirements of such laws in connection with any renewal of the term of this Agreement.

This Agreement shall be subject to modification or termination at the option of either Party and by written notice delivered to the other prior to the end of the otherwise effective term hereof, upon the occurrence of any of the following events:

(i) VMR is in default in the performance of any material covenant, term, or condition contained in this Agreement, pursuant to the terms and time frames set forth in Section 18.0 hereof.

(ii) A Full Funding Grant Agreement (FFGA) is not received for the portion of the project east of Rural/Terrace; the portion of the Project west of Rural/Terrace will allow light rail revenue operation to the 5th Street/College station and include construction of the intersection at Rural/new Terrace, temporary tail tracks and bumping posts for LRT, TPSS on Terrace east of Rural, and a temporary taper of the new work into the existing Terrace alignment.

Neither Party shall have any obligation to terminate this Agreement in the event of default, and may continue to perform hereunder without terminating and without waiving the right to terminate.

SECTION 4.0 STATEMENT OF MUTUAL SUPPORT

Tempe and VMR hereby acknowledge their support of the Project. Each Party agrees to cooperate with the other Party in a manner consistent with the commitments made and obligations assumed in this Agreement. Such cooperation and assistance shall include the dedication and reallocation of personnel, as required and feasible, to meet the Project goals with respect to budget, schedule, and quality. Tempe and VMR agrees to cooperate to prevent increases in Project scope beyond those identified in this Agreement.

SECTION 5.0 PROJECT CONDITIONAL ON FULL FUNDING GRANT AGREEMENT

COP, on behalf of VMR, has agreed to secure the Letters of No Prejudice needed to advance the Project prior to the award of an FFGA and agrees to apply for a FFGA from the Federal Transit Administration ("FTA"). VMR intends to use the proceeds awarded to VMR through COP under the FFGA to finance the design, construction, and management of the Project.

VMR's ability to undertake the Project as outlined in this Agreement is expressly conditioned upon the receipt of funding, from COP, under the FFGA in amounts sufficient to fund the Project consistent with this Agreement within the time frames set forth in this Agreement, and further conditioned upon the availability of annual appropriations under the FFGA and Stakeholder Local and Regional funds.

VMR will proceed with construction upon the receipt of No-Prejudice authority from the FTA as funds are available, and once Board approval is secured. Regarding the procurement of light rail vehicles, the Board has authorized two Notices to Proceed; NTP1 and NTP2. NTP1 allows the engineering of the vehicles and the production of two prototype vehicles. NTP1 is authorized in advance of a FFGA either a receipt of FFGA or through Board approval.

Tempe agrees to support the advancement of the Project, in advance of an FFGA, for the section of the Project from the western City limits to Rural/Terrace, contingent upon receipt of No-Prejudice authority.

SECTION 6.0 PROJECT SCOPE

The Project Scope for the Project is fully defined by the Invitation for Bid Contract Documents prepared for the procurement and construction of the Project. All understandings and agreements with regard to the facilities to be constructed, the equipment to be procured, the quality of product to be delivered, and the standards to

be followed are represented by the Contract Documents. The Project scope is illustrated in Table 6-1.

Table 6-1 – Project Scope

Project Scope	Contract Number
LS 1 – Bethany Home Road – Camelback Road/Central Avenue	LS1
LS 2 – Camelback/Central Avenue – McDowell Road	LS2
LS 3 – McDowell Road – 26th Street	LS3
LS 4 – 26th Street – Town Lake Bridge	LS4
LS 5 – Town Lake Bridge – Sycamore Street	LS5
Maintenance and Storage Facility	MSF
48th Street Bridge Replacement	B48
Town Lake Bridge	TLB
Transit Centers and Station Finishes	STF
Park and Ride Facilities	PNR
Rail Procurement	MP1
Concrete Crosstie Procurement	MP2
Traffic Signal Hardware Procurement	MP3
Ballasted Special Trackwork Procurement	MP5
Crossing Panel Procurement	MP6
Girder Rail/Girder Rail Special Trackwork Procurement	MP7
Light Rail Vehicle Procurement	LRV
Fare Collection System	FCE
Traction Electrification System	TES
LRT Signals and Communications	S&C
Miscellaneous Construction Contract	MC1

The information listed further within Section 6 is not intended to be inclusive of all Project elements and has been provided as an overview of the Project. In any

discrepancy between the information provided in the Contract Documents and the information in Sections 6.1 through 6.12, the Contract Documents shall control.

6.1 Route Description

The Central Phoenix/East Valley Light Rail Transit Project is 19.64 miles long, more or less, extending from 19th Avenue and Bethany Home Road in north central Phoenix through the City of Tempe to Main Street and Sycamore Street in the City of Mesa. For this agreement, the alignment within the borders of Tempe is 5.50 miles in length, more or less. Exhibit A contains a map illustrating the entire alignment and those sections specifically within the cities of Phoenix, Tempe, and Mesa. The route alignment within Tempe begins at Tempe's western City limit on Washington Street at approximately 56th Street and continues east on Washington to past Center Parkway where the guideway diverts south from Washington Street. Aligned between the UPRR corridor on the west and SR 202 on the east, the alignment continues south and crosses Tempe Town Lake on an independent bridge. The alignment continues south crossing 1st Street at-grade, then following the existing rail corridor known as the "Creamery Branch" in an easterly direction to the 5th Street/College Avenue/Stadium Drive intersection where the alignment enters the center of Stadium Drive and continues east to Sixth Street where the alignment again merges with the Creamery Branch corridor to a point directly south of University Drive where it departs the Creamery Branch and aligns with the center of a realigned Terrace Road, entering Terrace Road east of Rural Road. Following Terrace Road, the alignment turns east on Apache Boulevard, in the center, where it continues to the eastern limits of Tempe on the east side of the Tempe Canal.

6.2 Track

The three types of track used on this Project are embedded, ballasted, and direct fixation. Rail is placed at the standard width of 4-feet, 8.5-inches apart, with a distance

between centerline of tracks; typically at 13.5-feet in double track areas. A safety envelope around the track, called the dynamic envelope, defines the width of the guideway and is delineated by a curb, a material interface, or the edge of a concrete crossing panel. Following is a brief description of the different track types.

6.2.1 Track

Embedded Track – Embedded track is best described as rail embedded in concrete forming a trackslab that is 8-feet wide and typically 15-inches thick. The trackslab includes the rail and a snug rubber boot designed to match the shape of the rail, with both embedded in concrete. The concept is that the rubber boot inhibits stray current from leaving the rail as it returns to the traction power substation. In areas where the boot is inadequate; an elastomeric material will be used to provide the same level of stray current protection. Embedded track can be utilized in intersections, stations, structures, special trackwork areas, and between intersections.

Ballasted Track – Ballasted track has the rail placed on concrete ties, which are supported by rock ballast. Concrete ties are spaced approximately 30-inches apart. The distance from top of rail to top of subgrade is approximately 2.8-feet. Stray current protection is provided by placing a rubber pad between the rail and the concrete tie. The clip used to anchor the rail to the tie utilizes an insulator between the rail and clip. Together, both systems isolate the rail. Ballasted track can be utilized in stations, special trackwork areas, between intersections, and through intersections with concrete panels.

Direct Fixation – Direct Fixation (DF) trackwork is aptly named because it is the fastening of the rail directly to a structure. Typically DF is used on bridges or other locations where weight is a consideration. Ballasted track and embedded track are both alternatives supported by the ground; DF is supported solely by a structure. The

stray current protection utilized in direct fixation track on bridges is similar to that of Ballasted Track, see above.

6.2.2 Guideway Placement

The guideway for this Project will utilize existing roadway and railroad corridors. For description purposes, the following definitions have been generated to describe the track characteristics:

Center Running - Embedded – The tracks are located generally in the center of the roadway with vehicular traffic on each side of the track corridor, see Figure 6-1.

Corridor Running - Embedded – The track corridor is located in an independent corridor separate from any roadway corridors, see Figure 6-2.

Figure 6-1 – Center Running – Embedded Track

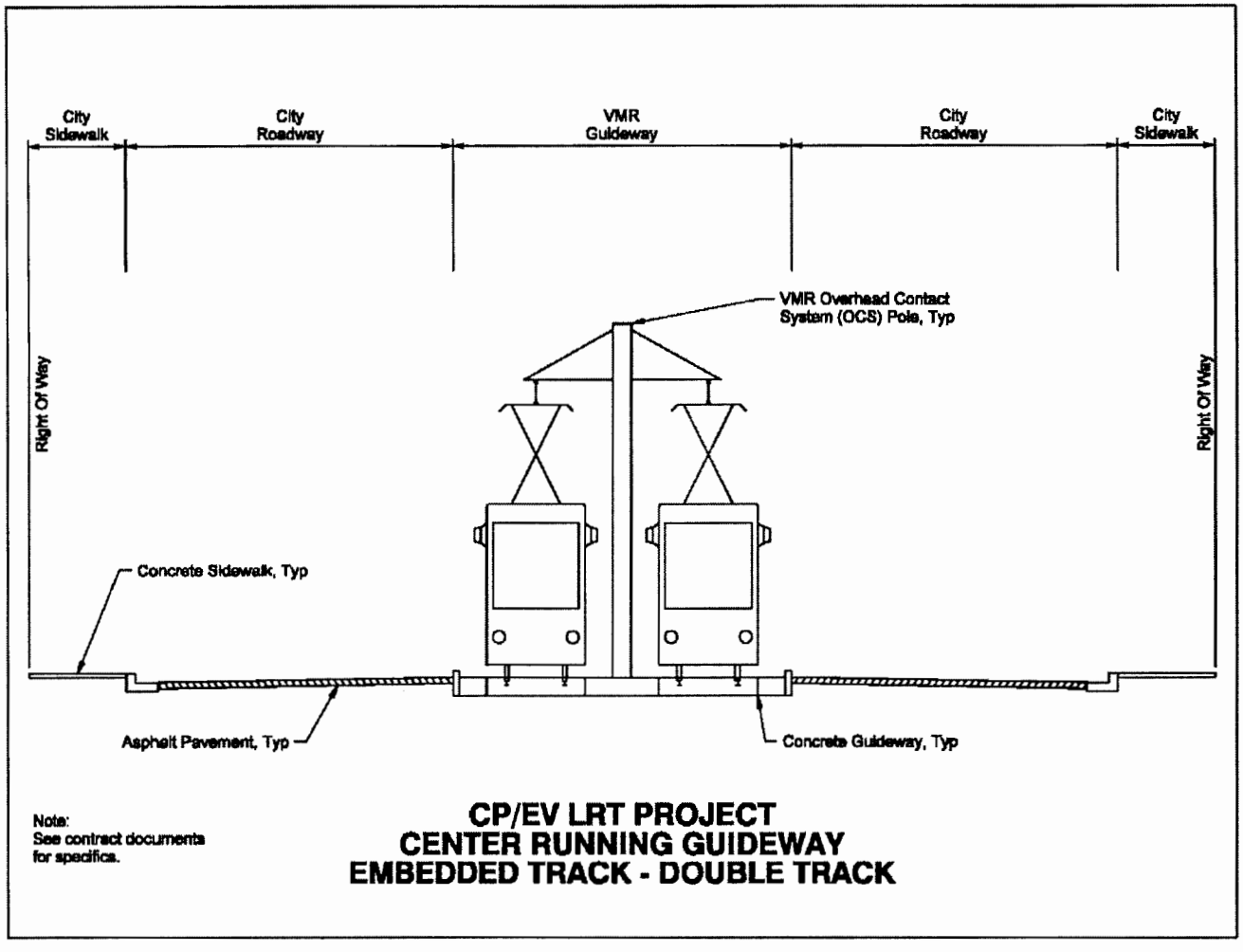
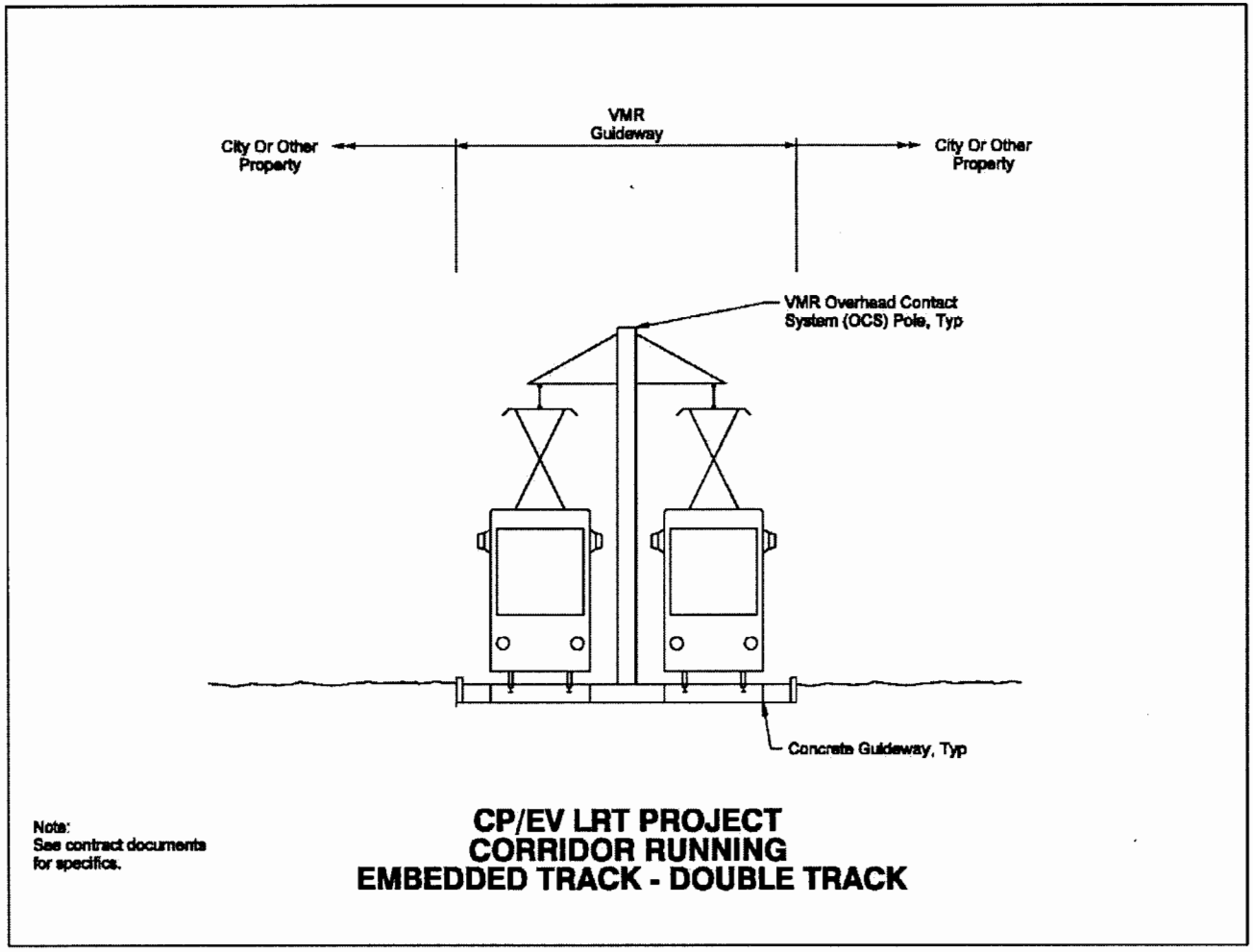


Figure 6-2 – Corridor Running – Embedded Track



6.2.3 Track Usage

The Contract Documents indicate the track used along the corridor. Subject to the Contract Documents, the track used along the corridor will be as follows:

Washington Street (56th St. to Center Parkway)
Center Running – Embedded Track – Double Track

Tempe Town Lake Bridge and UPRR Corridor (Washington to 1st Ave)
Corridor Running – Direct Fixation – Double Track

Creamery Branch (First St. to Fifth St./College Ave.)
Corridor Running – Embedded Track – Double Track

Stadium Drive (5th St. to 6th St.)
Center Running – Embedded Track – Double Track

ASU (6th St. to Terrace Rd.)
Corridor Running – Embedded Track – Double Track

Terrace Road (ASU to Apache Blvd.)
Center Running – Embedded Track – Double Track

Apache Road (Terrace Rd. to Tempe Canal Bridge)
Center Running – Embedded Track – Double Track

Apache Road (Tempe Canal Bridge)
Center Running – Embedded Track – Double Track

6.2.4 Drainage Facilities

VMR shall construct new drainage facilities to accommodate storm water within its guideway. These facilities will consist of underdrains in ballasted track areas and track drains in embedded track areas. Trench drains or inlets will be added to provide drainage around station platforms and other VMR facilities as necessary. These drains will connect to the City's storm sewer system through the use of pipe collars.

City roadway drainage facilities will be reconstructed or relocated in kind in areas where street reconstruction is required. New drainage facilities may be added to accommodate changed drainage patterns.

The storm sewer system will be maintained by VMR's contractors in areas under construction until the reconstructed City facilities are completed and turned over to the City. VMR will ensure the Contract Documents reflect Storm Water Pollution Prevention Plan Best Management Practices during construction.

6.2.5 Gated Crossings

Crossing gates, crossbuck signs and flashing lights will be provided at the following locations:

- Washington Street – east of Center Parkway
- 1st Street (joint use with UPRR)
- Mission Palms/Hayden Mill (future)
- Macayo's Parking Area
- University Drive – east of Stadium Drive

Crossbuck signs and flashing lights will be provided at the following locations:

- Maple Avenue
- Ped/Bike Crossing – east of 6th Street

All crossing gates, crossbuck signs, and flashing lights will be owned and maintained by VMR, except the 1st Street crossing equipment is subject to the agreement between VMR and UPRR.

6.3 Roadway

6.3.1 Geometry

The roadway geometry varies significantly with turn lanes, frontage lanes, and through lanes. In locations where the existing roadway width is not adequate, property will be consistent with Exhibit E and F. See Contract Documents for the exact lane configuration, sidewalk widths, planter widths, and lane widths.

Vehicular traffic will not be allowed on the track except in signalized intersections. A 6-inch minimum barrier curb will separate the track and traffic lanes in all locations otherwise not accessible to vehicular traffic, except for pedestrian crossings.

6.3.2 Pavement

The pavement along the Project will either be new, reconstructed or reconditioned. New pavement will be installed in areas where the roadway is widened. Pavement reconstruction will occur when either the existing pavement is too impacted by utility relocations or the pavement is distressed past repair. Generally, new pavement and reconstructed pavement will match the thickness of the existing adjacent pavement. Pavement reconditioning will be accomplished on all areas not reconstructed or new using Microseal. See the Contract Documents for the limits of paving and paving cross section.

6.3.3 Traffic Signals

All signalized intersections along the Project alignment will receive new traffic signal poles, mast arms, signal heads, controllers, and cabinets as included in the Contract Documents. Traffic signals shall be constructed in accordance with Tempe standards.

Tempe shall be responsible for procuring all poles and mast arms and related accessories needed to construct traffic signals for intersections in Tempe. COP will procure signal cabinets and controllers for the Project. The cities will be reimbursed by VMR for the costs of these procurement contracts with Project funds. Tempe shall accept delivery of their respective traffic signal equipment and store the equipment at a centralized location. VMR's contractor shall pick up poles and mast arms, deliver to the worksite, and install all signal equipment per the Contract Documents. VMR shall be responsible for the operations and maintenance of the new signals until all traffic signals are tested for acceptance by Tempe. The COP has secured an option for an upgrade of a traffic management system, specifically for Tempe. Tempe has 180 days to exercise this option. Coordination to exercise this option will be through VMR. If

Tempe chooses not to exercise this option, Tempe will be responsible for the procurement of the upgrade; VMR will reimburse Tempe for associated costs.

The traffic signal system will provide the light rail vehicle system predictive priority through peer to peer communications optimizing the priority to the light rail vehicle while minimizing the impact to vehicular traffic.

All signal heads shall be LED.

Audible signals will be used at all new intersections per federal guidelines.

6.3.4 Signing

New traffic signage shall be provided to facilitate the new lane configurations. Existing signage along the alignment that is not affected by construction will remain unless it is in conflict with the new traffic conditions.

6.3.5 Intersections

Figure 6-3 illustrates the lane configuration at each signalized intersection along the alignment and intended to be consistent with Contract Documents. In the event of a discrepancy, the Contract Documents control. A signalized intersection signifies that vehicular traffic may cross the track governed by a traffic signal.

6.4 Landscaping/Irrigation

Landscaping on the sides of the roadway will follow a "replace in kind" standard if right of way is available. If a roadway is widened or landscaping is disrupted due to utility or other construction work, similar landscaping will be re-installed.

Landscaping on station platforms will be unique to each platform but typically includes: trees and shade structures.

Landscaping will be provided adjacent to station platforms on both sides of the roadway for approximately 350-feet in each direction from the center of the station platform. Landscaping adjacent to station platforms shall be consistent with rail station platform landscaping criteria.

Figure 6-3
CP/EV LRT Project
Signalized Intersections

	Lane Configuration	56th Street/Washington Street	Priest Dr./Washington Street	Center Parkway/Washington Street	Wells Fargo	Trillium	Ash Ave/Third Street	Mill Ave/Third Street	College/Fifth Street	Stadium Drive Ped	Stadium Dr/Sixth Street	Stadium/University	Rural Rd/Terrace Rd/Tyler St	Lemon St/Terrace Rd	Apache Blvd/Terrace Rd	Dorsey Ln/Apache Blvd	Fire Station	Elm St-Una Butte Ave/Apache Blvd	McClintock Dr/Apache Blvd	New Police Building/Apache	Smith-Martin/Apache Blvd	River Dr/Apache Blvd	SB Price Frontage/Apache Blvd	NB Price Frontage/Apache Blvd	Loop 101 Park and Ride/Apache	Lebanon/Apache	Tempe Canal Trail/Apache
North Approach (SB Direction)	# of Right Turn Lanes	1	1								1			1		1			1	1	1				1		
	# of Thru Lanes	1	3	1	2	2	1	1	1			x	3	1	1			1	2		1	1	2				
	# of Left Turn Lanes	1	2	2	1	1		1			1	x			1	1			2	1			1				
	Bike Lane	1			1	1	1	1						1	1												
	# of Frontage Road Lanes																										
East Approach (WB Direction)	# of Right Turn Lanes	1	1	1									1														
	# of Thru Lanes	2	2	2	2	2	1	1	1	1	1	x		1	2	2	2	2	2	2	2	2	2	3	2	2	2
	# of Left Turn Lanes	1	1	1	1	1	1	1	1				1		1	1		1	1	1	1	1	1	X	1		
	Bike Lane	1	1	1	1	1			1	1	1		1		1	1	1	1	1	1	1	1	1	1	1	1	1
	# of Frontage Road Lanes																										
South Approach (NB Direction)	# of Right Turn Lanes	1	1	1											1												
	# of Thru Lanes	1	3	3	2	2	1	1	1			1	3	1				1	3		1	1		2			
	# of Left Turn Lanes	1	2	1	1	1		1				2			1				2					1			
	Bike Lane	1			1	1	1	1				1		1													
	# of Frontage Road Lanes																										
West Approach (EB Direction)	# of Right Turn Lanes		1																								
	# of Thru Lanes	2	2	2	2	2	1	1	1	1	1	x	1	1	2	2	3	2	2	2	2	2	3	2	2	2	2
	# of Left Turn Lanes	1	1	1	1	1		1	1		1	x	1			1		1	1		1	X	X	1		1	
	Bike Lane	1	1	1	1	1			1	1	1				1	1	1	1	1	1	1	1	1	1	1	1	1
	# of Frontage Road Lanes																										

[X] Unchanged from existing

Track centers will be widened to 25-feet on Washington between 56th Street and Center Parkway to provide for landscaping consistent with the existing landscaping in the Papago Park Center.

New irrigation will be provided where new landscaped areas are provided. Existing City owned irrigation systems will be tested prior to construction to verify operational fitness. Systems found to be non-operational shall have heads, valves, and controllers relocated and left in a connection-ready status. Private existing irrigation systems will be stubbed and capped or as defined in easement or property transactions, see Section 9.0.

6.5 Street Lighting

Street lighting along the Project will be modified in some areas and maintained in others. Street lights, hardware, and appurtenances replaced will be salvaged where possible. Following is a general discussion of the street lighting planned for this Project:

Washington Street (56th Avenue to Center Parkway)

New or relocated architectural style street lights on both sides of the roadway, maintain spacing

Stadium Drive (5th St. to 6th St.)

New downtown-style street lighting, at pedestrian spacing

Terrace Road (ASU to Apache Blvd.)

New Apache Blvd. (nautical) on both sides of the roadway, at pedestrian spacing

Dorsey Lane (Apache Boulevard to Dorsey Park-n-Ride)

Pedestrian lighting on west side of roadway

Apache Boulevard (Terrace Rd. to City Limits)

Relocate existing street lighting, maintain spacing

6.6 Utilities

6.6.1 Public Utilities

Public utilities include the water distribution system, storm sewer system, sanitary sewer system, irrigation distribution system, telecommunications system, and the street lighting system, see Section 6.5. All new and reconstructed public utilities will be installed in accordance with the Contract Documents. Following is a brief description of the general requirements:

For existing utilities within the guideway a minimum vertical distance of 4-feet from the top of rail to top of a utility (or encasement) must be maintained together with evidence that the material, type, condition, and load capacity of the utility is sufficient. Access for maintenance, inspection, new services, or other purposes to the utility by way of manholes, vaults, valve boxes, clean outs, taps, etc., shall be made at least 10-feet from the centerline of the nearest track. Utilities not meeting these criteria shall be relocated.

Utilities that are new or relocated as part of the Project that are longitudinally oriented with the track alignment, shall be constructed at least 10-feet beyond the centerline of the nearest track. New or relocated utilities that cross under the guideway shall have a minimum vertical distance from top of rail to top of utility (or encasement) of at least 6.5-feet, extending to 10-feet beyond the centerline of the nearest track. Exceptions to this shall be included in the Contract Documents.

VMR shall assure relocated utilities are tested and accepted by Tempe prior to taking existing utilities out of service.

Public utility relocations shall follow all of Tempe's permit procedures. Tempe will be responsible for the operation of its water and sewer systems.

All utility work shall follow Arizona Bluestake requirements.

6.6.2 Private Utilities

This agreement has no force over third-party utility companies however, applicable information includes:

The City shall direct private utility companies, through established franchise agreements, to design and relocate utilities at the request of VMR, at no cost to the Project. VMR will pay for private utility design and relocation for utilities with "prior rights". "Prior Rights" mean the rights of private utility companies beyond those provided through franchise agreement.

6.7 Stations

There are 27 stations or stops (and one deferred station) on the Project in each direction of travel. Due to the downtown Phoenix alignment and one-way couplets, there are 36 station platforms. The station platforms for this Project are either 260-feet or 280-feet long, all capable of supporting a 3-car, light rail vehicle train set. The platform locations vary depending on the guideway location within the roadway corridor. Changes to the station names require VMR Board concurrence. The stations shall be signed as shown in Table 6-2.

Table 6-2 – Station Names

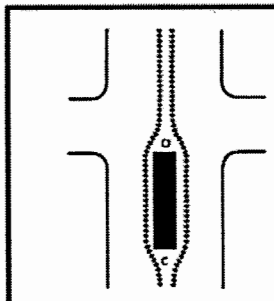
CP/EV LRT Project Station Names	
PHOENIX STATIONS	12th St/Washington
Montebello/19th Ave	12th St/Jefferson
19th Ave/Camelback	24th St/Washington
7th Ave/Camelback	24th St/Jefferson
Central Ave/Camelback	38th St/Washington – GWCC
Campbell/Central Ave	44th St/Washington – Airport
Indian School/Central Ave	**TEMPE STATIONS**
Osborn/Central Ave	Priest Dr/Washington
Thomas/Central Ave	Washington/Center Parkway (deferred)
Encanto/Central Ave	Mill Ave/Third St
McDowell/Central Ave	Fifth St/College – ASU
Roosevelt/Central Ave	University Dr/Rural – ASU
Van Buren/Central Ave – Copper Square	Dorsey/Apache Blvd
Van Buren/1st St – Copper Square	McClintock/Apache Blvd
Washington/Central Ave – Copper Square	Smith-Martin/Apache Blvd
Jefferson/1st St – Copper Square	Price Fwy/Apache Blvd
3rd St/Washington – Copper Square	**MESA STATIONS**
3rd St/Jefferson – Copper Square	Sycamore/Main St*

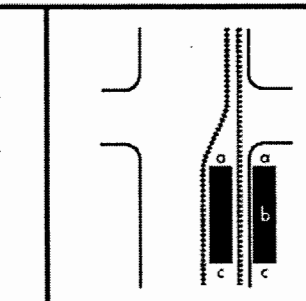
* Station name pending Board action

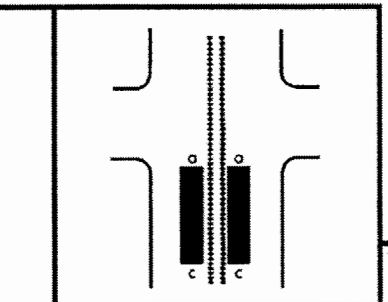
Figure 6-4 illustrates the location of stations within the City's roadway corridor, the access points, and the station's relationship to the nearest intersection. Additional information on the station platforms is listed below.

- Emergency egress will be provided at all stations with single access only. Horizontal and vertical shading devices will be employed at all stations to provide a viable comfort level to patrons.
- Platform surfacing will be a combination of pre-cast concrete pavers, terrazzo accents, and other artist designed features, see Section 7.1.1.
- One Passenger Assistance Phone will be provided at each Station Entry.

FIGURE 6-4
Station Platforms







Station	Center Platform/ Center Boarding	Side & Center Platform/ Side & Center Boarding	Split Center Platform/ Side Boarding	Station Information	
				Access to Station	The station is "___" of the intersection
Priest Drive/Washington	X			a,c	southeast
Mill Avenue/Third Street			X	a,c	west
Fifth Street/College		X		a,b,c	west
University Drive/ Rural			X	a,c	west
Dorsey/Apache Boulevard	X			a,c	east
McClintock/Apache Boulevard	X			a,c	east
Smith-Martin/Apache Boulevard	X			a,c	east
Price Freeway/Apache Boulevard	X			a,c	east

6.8 Traction Electrification System

The Traction Electrification System is comprised of two basic work scopes. These are: the Traction Power Substations (TPSS) and the Overhead Contact System (OCS).

6.8.1 Traction Power Substations

The TPSS have been designed and located to provide sufficient power to achieve 6-minute headways utilizing 3-car train sets. The system will operate at full capacity with one substation out of service.

Project wide, there are a total of sixteen (16) substations; fourteen (14) mainline substations, one (1) substation in the yard at the Maintenance and Storage Facility (MSF) and one (1) substation in the MSF building. The spacing for the substations varies from just over one mile to just over two miles. Spacing is based on simulated loading and is influenced by real estate availability.

TPSS locations in Tempe are as follows: (from north to south and west to east)

- ***Town Lake TPSS***: This substation is located east of the Town Lake Bridge on the east side of the track at the northwest corner of 1st Street and Ash Avenue.
- ***Terrace TPSS***: This substation is located on the north side of Terrace Rd. directly east of Rural Road.
- ***McClintock TPSS***: This substation is located on the south side of Apache Blvd. at the east end of the McClintock Park and Ride lot.

Each of the stand alone substation buildings will have an approximate exterior dimension of 21' by 43' and be constructed of CMU (concrete block) with a metal roof. The exterior treatments of the buildings will vary by site. On the street side the landscape will extend from the back of sidewalk through the building set back to the

perimeter of the ground grid. On the other three sides a 6 foot minimum landscaping area will be provided.

Each of the TPSS sites will have a 5 to 10 foot wide ground grid extending out from the building. This area will be covered by one-inch of gravel or asphalt to provide for safe touch and step potential. A driveway will be provided for service vehicles. Underground ductbanks, manholes, and handholes will be constructed to support the primary power circuit, DC feeder circuit, and communication/signaling cabling. The utilities require a 5 foot cube for the primary metering disconnect at each site.

6.8.2 Overhead Contact System (OCS)

Mainline OCS will be constructed with the light rail system in Tempe. The OCS distributes the power generated by the traction power substation that is used to propel the light rail vehicles.

The principal type of OCS used on the mainline is SCAT (Simple Catenary Auto-Tensioned). Simple Catenary is a single contact wire supported by a messenger wire.

Auto-Tensioned means the catenary will maintain a constant tension of 6000 lbs for the messenger wire and 3000 lbs for the contact wire by utilizing a balance weight system attached to the OCS through a pulley arrangement. The balance weights are enclosed within an OCS pole. The weights travel up and down as the OCS expands and contracts with temperature changes.

There is some SCFT (Simple Catenary Fixed Tension) at locations where the OCS goes under bridges or turns 90° corners.

The mainline catenary system will be supported by low-profile cantilever arms. The arms will have a gull wing profile. The system depth is 24 inches. The system depth is the distance between the messenger and contact wire at the supports. The contact wire will be a minimum of 18 ft. above the adjacent roadway. Exceptions to this height will be where the OCS passes under bridges. The low profile and 24 inch

system height allows for a maximum span length of approximately 150 feet in tangent track areas.

The poles used to support the OCS are round tapered tubular. The poles will be 22 feet to 24 feet in height and have a 15 inch diameter at the base. The poles will be painted as defined in the Contract Documents. The foundation for the OCS poles varies depending on the use however; the foundations are generally 12-feet deep and 3-feet in diameter.

The OCS poles will primarily be located between the two tracks. Two cantilever arms will be mounted on each pole to register the messenger and contact wire over the track. The arms will be mounted to the pole with stainless steel bands. At the approach to the center platform stations two center poles each with a single arm will be used to register the contact and messenger wires over the track.

6.9 Communication and Signal System

The Communication and Signal System is comprised of two basic work scopes; Communication and Train Signaling.

6.9.1 Communication System

The Communication System transmits data for the Supervisory Control and Data Acquisition (SCADA), Closed Circuit Television (CCTV), Train Signals, and Fare Collection System from the mainline back to the operation and control center. The data is transmitted through a fiber optic network installed in underground ductbanks below the track along the entire length of the light rail system.

In the City of Tempe there is one (1) stand-alone Communication & Signal building located in the vicinity of the 5th and College Station at the east end of the storage track area.

Each of the stand alone buildings will have an approximate exterior dimension of 12' by 25' constructed of CMU (concrete block) with a metal roof. Each of the co-

located buildings will be 21' by 58' and will be of the same construction. The exterior treatments of the buildings will vary by site. On the street side the landscape will extend from the back of sidewalk through the building set back to the perimeter of the ground grid. On the other three sides a 5 foot minimum landscaping area will be provided.

Communication Interface Cabinets will be installed on each station platform to provide access for the data transmission requirements of the SCADA, CCTV, and Ticket Vending Machines.

6.9.2 Signaling System

The Train Signaling provides for control of the special trackwork such as turn-outs and crossovers. The signal system also controls specialized train signal lights which are used by the train operators for traversing through each signalized intersection and roadway/track interface. In addition, the Signal System interfaces with the traffic signal system to provide a predictive timing element that allows for the smooth movement of trains through signalized intersections.

In addition to the signaling equipment in the Communication & Signal Houses, there will be signal cases installed at some of the special trackwork areas along the mainline. The signal cases are similar in size and shape to the standard traffic signal controllers used at signalized intersections.

Cabling for the Signaling System will be installed in the same underground ductbank as the Communications System.

6.10 Park and Ride/Transit Center Locations

There are eight planned park and ride lots and five transit center locations along the Project. Park and ride and transit center facilities are intended for transit patrons. As of the date of this Agreement, parking is free at all lots. Park and ride lots and

transit centers will be close to light rail stations, specifics are provided below in Table 6-3.

Table 6-3
Park and Ride/Transit Center Locations

Station	Regional vs Local	Parking Capacity*	Developed Transit Center	Bus Connectivity
PHOENIX				
Montebello/19th Avenue	Regional	825	X	X
19th Avenue/Camelback	Regional	400		X
Central Avenue/Camelback	Local	110	X	X
38th Street/Washington	Local	220		X
44th Street/Washington - Airport	Local	0	X	X
TEMPE				
Fifth Street/College	Local	0	X	X
Dorsey/Apache Blvd	Local	90		
McClintock/Apache Blvd	Local	440		X
Price Freeway/Apache Blvd	Regional	750		X
MESA				
Sycamore/Main Street	Regional	750	X	X

* See Contract Documents for final count.

6.11 Light Rail Vehicles

The initial procurement of light rail vehicles will be for 36 bi-directional, 70% low-floor vehicles with an option to secure up to 24 additional vehicles within the same procurement at a later date. Each light rail vehicle can operate singularly or can link together for a maximum of a 3-car train set. Single light rail vehicles or multi-car train sets are operated by a single operator. Low-floor vehicles allow boarding at a height effectively equivalent to the platform height on the majority of the vehicle. Vehicle characteristics are listed below:

Capacity	200 passengers per vehicle
Seating Capacity	66 passengers per vehicle
Vehicle Length	93 feet
Vehicle Height (less pantograph)	12-feet 5.6-inches

Vehicle Static Width	8-feet 11.7-inches
% Low Floor	70%
Air Conditioning	Yes
Voltage	750Vdc
Maximum Operating Speed	55 mph
Wheelchair Positions	4 per vehicle
Bicycle Positions	4 per vehicle

6.12 Maintenance and Storage Facility (MSF) and Access Track

The MSF and Access Track, which is defined as a Regional facility, is designed to accommodate a fleet of 40 light rail vehicles with expansion capabilities to 100 vehicles. The shop and yard design is based on articulated, double-ended, operating cab, low floor vehicles. Included in the MSF are a Maintenance of Equipment (MOE) shop, Maintenance of Way (MOW) shop, Train Wash, Service and Cleaning Area, LRV Storage Yard, and Access Track.

The MSF site covers 61 acres; 45 acres are available for MSF site development and 16 acres are zoned Historic Preservation Overlay Area. The parcel is owned by COP and is bounded by 48th Street on the west, Sky Harbor Boulevard on the south, Loop 202 on the east, and the Salt River Project (SRP) Grand Canal on the north.

The predominant portion of the site is the former Salt River bottom and continues to function as a drainage discharge area for Maricopa County Flood Control District, SRP, ADOT, and normal site drainage passing through the site to the Salt River via large culverts under Sky Harbor Boulevard. The site will need extensive fill, approximately 600,000 cubic yards, to raise it to an elevation above the 100-year flood plain.

Site potable and fire protection water shall be provided from water mains located on Washington Street. Waste water will be discharged into existing sewer lines under 48th Street. Storm water shall be discharged into the Salt River.

The site will have an internal circulation road system connecting to 48th Street and provide access for employees, visitors, delivery, and emergency services to all

facilities. Roads shall be designed to accommodate the emergency services vehicles and will also permit deliveries of light rail vehicles (LRVs) on semi-trailers. An entry station/guard house will be provided for controlled access to the site for housing equipment for monitoring critical security areas of the site.

The vehicular entrance to the yard is via 48th Street at the west end of the site. The existing 48th Street will be re-graded and reconstructed from a point north of the Union Pacific Railroad (UPRR) tracks to the edge of the MSF site where it will connect to an internal site circulation roadway. The UPRR grade crossing will be modified as needed and the existing bridge over the SRP Grand Canal will be replaced with a new bridge to meet AASHTO design standards to accommodate MSF traffic and truck loading of HS-25-44 capacity. A parallel separate bridge will also be provided for pedestrian use and utility lines. The segments of 48th Street south of the canal, the yard entrance road, and the northerly segment of the internal yard circulation roads, are within the Historic Preservation Area.

6.12.1 Yard Lead

The LRV access to the site will be via a yard lead track located on the west side of the Loop 202 and within ADOT right-of-way. The yard lead track will proceed south of Washington Street on the west side of Loop 202 on an embankment retained by structural walls and proceed over the UPRR tracks, SRP canal, then slope down to the site. A graded LRT service road will be located between Washington Street and the bridge over the UPRR right of way and SRP canal. A graded service road will also be located from the MSF yard north to the bridge over the SRP Canal and the UPRR. Highway vehicle access over the UPRR right of way and SRP Canal Bridge will be prohibited.

6.12.2 Maintenance of Equipment (MOE)

The MOE building is approximately 136,000 square feet including a 36,000 square foot basement, a mezzanine reception/conference area of approximately 5,000 square feet and a second floor general office area of 21,000 square feet. The following functions will be served by this facility:

- VMR/Regional Public Transportation Authority (RPTA) MOE and Operations oversight staff
- LRT Operator MOE and Operations staff
- Visitor reception area
- LRV heavy repair (HR) and unscheduled repair (UR) tracks
- Preventive maintenance (PM) and corrective maintenance (CM) tracks
- Wheel-truing track
- LRV Body Repair and Paint booth track
- All MOE support shops
- LRT System central storage

All major maintenance and component change-out will be undertaken within this shop. Major rebuilding of components shall be performed offsite by third-party vendors. Each shop bay shall accommodate two LRVs and be capable of being expanded to four LRVs. All shop tracks are run-through with a shop bypass/loop track.

Material handling will be provided by a series of bridge cranes, monorails, jib-cranes and elevators. Two in-floor hoists, as well as portable LRV lifts, are provided to lift LRVs. All MOE support shops, foreman's offices, and mechanic welfare facilities are located on the shop floor. General offices are located on the second floor level.

6.12.3 Maintenance of Way (MOW)

The MOW shop structure is approximately 18,000 square feet. A secured Maintenance of Way (MOW) shop compound provides a small office for administrative staff, support shops, interior controlled storage area, exterior stores area, hazmat storage, parking for all MOW vehicles, and a rail siding for MOW equipment storage.

MOW involves the inspection, Preventive Maintenance (PM), and Corrective Maintenance (CM) required for all fixed facilities and wayside equipment. The MOW

area is a staging point for MOW personnel, vehicles, equipment, components, and material. Personnel assigned to the MOW shop will inspect and repair major wayside equipment. Most PM and CM work, whether on track, OCS, traction power substations, signals, facilities, or wayside equipment is expected to be performed along the ROW. Personnel will travel to the site with the tools, vehicles, equipment, and material necessary to perform the work. Failed components will be repaired at the wayside site or changed-out and returned to the MOW area for minor repairs, additional component change-out, and shipping to a vendor for major repairs.

6.12.4 LRV Train Wash

A single track, enclosed, one-direction, recycling LRV washer is provided in line with the Service and Cleaning (S&C) tracks. A support enclosure houses the equipment rooms supporting the washer.

6.12.5 Service and Cleaning Area

The daily servicing, cleaning and inspection of the LRVs will be performed in the S&C area including interior cleaning, sanding and daily inspections. This area consists of two electrified tracks with an LRV floor high platform. The platform provides support facilities such as: sanding equipment, slop sinks, floor drains for draining cleaning equipment, water, storage equipment for day-to-day supplies and mini-dumpsters for refuse. A one-half LRV car under car inspection pit is provided on one track along with a LRV roof high inspection platform. Support offices for LRV inspection staff are adjacent to the pit area. Storage containers for local secured storage, compactor/dumpster, electric cart and vehicle parking are provided adjacent to the S&C area.

SECTION 7.0 PROJECT MANAGEMENT

7.1 Project Management

VMR shall manage the design and construction of the Project. VMR shall assume all duties, obligations, and liabilities typically attributable to "owner" status, except as otherwise provided herein.

7.1.1 Art in Transit

The Art in Transit program will be an integral component of both the design and construction phase of the Project. The Project will dedicate up to $7,247,000 for artwork. The Art in Transit program will be conducted in accordance with FTA Circular 9400.1A. VMR shall manage the artist selection process and the development of proposed artwork, both of which shall be subject to the approval of the Regional Rail Arts Committee (RRAC). The expenditure and distribution of Project artwork funds will be a function of Design and Construction Miles and/or local ordinance provisions.

7.1.2 Public Involvement

VMR agrees to create and coordinate a public information program designed to inform and include the public in the design and construction of the Project. Exhibit C Public Involvement provides the guidelines for public involvement through the design and construction phases of the Project.

Tempe agrees to commit the following staff positions, with varying utilization, to support the Project for community outreach:

- Light Rail Project Manager
- Principal Planner
- Principal Civil Engineer
- Community Outreach and Marketing Coordinator

Compensation of the positions listed above is described in Section 12.5.

7.1.3 Monthly Progress Reporting

VMR will produce a monthly progress report providing an update on project status, budget, schedule, and other information as determined by the Board. The

information contained in the progress report will be general in nature. Five copies of progress report will be provided to the City. Under separate cover and not for public distribution, a change order log will be disclosed identifying change orders that have been processed during the reporting period. Additional distribution or copies for the City are the responsibility of the City.

7.2 Rail Staff Working Group (RSWG)

The Rail Staff Working Group (RSWG) shall be formed with representatives from each member city, VMR's Chief Executive Officer, Assistant Executive Director, Director of Design and Construction, Director of Governmental Relations, and the Director of Program Control and Administration. The member cities will choose a representative from one of the cities to serve as the chair of the RSWG. The RSWG is responsible for review of policy decisions prior to being addressed by the Board, making policy recommendations to the Board, and elevating unresolved RSWG actions to the Board for resolution.

The RSWG is authorized to make policy decisions for the Project not required to go before the Board. VMR is responsible for preparing and presenting RSWG issues to the Board.

7.3 Project Change Orders

7.3.1 Project Change Process

The City shall identify one individual as the focal point for all change order requests. All change order requests shall be submitted in writing to VMR's Director of Engineering and Construction. VMR agrees to respond to the City within two weeks identifying the impacts to cost and schedule and to determine the next efforts required to advance the change order.

The Director of Engineering and Construction is responsible for obtaining the required signature authorities as mandated in Section 7.3.2.

Any change orders in dispute shall follow the issue resolution process identified in Section 15.0, Issue Resolution.

7.3.2 Change Order Authorization

Change order authorization is shown in Table 7-1.

Table 7-1 - VMR Change Approval Authority

VMR Contract Change Approval Authority			
Change Amount	**Conditions**	**Recommendation**	**Approval**
≤ $50,000	• Change is consistent with intent of project scope • No Project Reserve is needed • Change is within Board authorized contingency	Director of Design and Construction Or Director of Program Control and Administration	Assistant Executive Director
>$50,000 and ≤ $150,000	• Change is consistent with intent of project scope • No Project Reserve is needed • Change is within Board authorized contingency	VMR Change Control Board	Chief Executive Officer
> $150,000 and ≤ Board Authorized Contingency	• Change is consistent with intent of project scope • No Project Reserve is needed	Assistant Executive Director	4C approves and Chief Executive Officer signs
All amounts ≤ $150,000	• Change is not consistent with intent of project scope • No Project Reserve is needed	Assistant Executive Director	4C approves and Chief Executive Officer signs
> Board Authorized Contingency	• Any	4C	Board approves and CEO signs
Any Amount	• Change impacts the project's revenue operation date	4C	Board approves and CEO signs
Any Amount	• Project Reserve Required	4C	Board approves and CEO signs
Any Amount	• City approved project budget is exceeded	Chief Executive Officer	Affected City Council

VMR Change Control Board Members:

- Assistant Executive Director, Chairperson
- Director of Program Control and Administration, Vice Chairperson
- Director of Design and Construction
- Director of Operations and Maintenance (future)
- Construction Administration Consultant Project Manager

Regional Configuration Change and Control Committee (4C) Members:

- Chief Executive Officer, Chairperson
- Assistant Executive Director, Vice Chairperson
- Director of Design and Construction
- Director of Program Control and Administration
- Director of Operations and Maintenance (future)
- Construction Administration Consultant Project Manager
- City representative authorized to request change, one from each participating city (Phoenix, Tempe, and Mesa)

Other Important Considerations:

- VMR retains the right to delegate approval authorities, within the established limits for amounts up to $50,000.
- Change approval authority for cost reductions will be the same limits as for cost increases.
- The Change Control Board will meet bi-weekly, as needed.
- The 4C will meet monthly, as needed.
- Affected city staff will be sent an invitation and agenda for all Change Control Board and 4C meetings. Affected city staff will be given an opportunity to speak at these meetings to represent their issues, concerns, and endorsements.
- For changes not requiring Change Control Board or 4C involvement, VMR staff will coordinate these changes with affected city staff.

7.4 City Staffing

VMR recognizes the City has interest in assigning individuals to the Project to either provide administrative support, construction support, or oversight for the implementation of City facilities.

Tempe recognizes that the budget for the Project is fixed and needs to be managed based on a fixed scope of work. The following list identifies approved positions for the Project. Section 12.5 and Exhibit D-4 provides the limitations and anticipated approved expenditures associated with the positions. It is the City's

responsibility to provide adequate management for the assigned individuals to ensure their efforts are not duplicated or that their involvement in the Project does not exceed the approved budget.

Public Works Manager
Deputy Public Works Manager – Transportation
Light Rail Project Manager
Transit Administrator
Principal Civil Engineer – Transportation
Transit Finance Specialist
Senior Planner/Municipal Property Specialist – Redevelopment
Principal Planner – Transportation
Community Outreach & Marketing Coordinator – Transportation
Traffic Engineer Supervisor
Principal Planner – Redevelopment
Intelligent Transportation System Coordinator
Deputy Public Works Manager – Engineering
Senior Engineering Associate – Transportation
Principal Planner – Transportation
Transportation Planner – Land Acquisition
Fine Arts Coordinator – Public Art
Transportation Planner
Relocation & Acquisition Specialist

7.5 Project Schedule

The baseline schedule consists of activities that represent the work plan to accomplish implementation of the light rail program. The major milestones for opening of various portions of the Project are established and controlled by the VMR Board. VMR program control staff establish and maintain intermediate level activities and milestones in support of Board controlled major milestones. The City shall support VMR in their efforts to meet Project milestones in order to achieve timely implementation of the Project. The City also agrees to cooperate and work with VMR to mitigate adverse schedule conditions that jeopardize on-time Project completion.

VMR will provide a monthly status report on the activities contained in the master schedule and assess adherence to the baseline schedule requirements.

SECTION 8.0 NOT USED

SECTION 9.0 REAL ESTATE

Consistent with Article XIII – OPERATIONS, Section 4 Eminent Domain, of the By-Laws of VMR., the City agrees to acquire real property within its boundaries or, if necessary, to exercise its power of eminent domain to acquire real property that the Board has determined is needed for the Project. Condemnation will only be initiated per applicable laws and upon receipt of resolution by the Tempe City Council.

A Real Estate Acquisition Management Plan has been developed for the property acquisition needs for this Project and is provided in Exhibit F, less attachments. The basic responsibilities with respect to real estate are listed below.

VMR is responsible for:

- Identifying real estate needs including acquisition priorities
- Property surveys
- Property descriptions
- FTA approvals when value is greater than $1,000,000
- Identifying temporary construction easements
- FTA Appraisals Coordination
- Demolition, where applicable

Tempe is responsible for:

- Property appraisals
- Making offer of Just Compensation
- Settlement negotiations
- Filing Order of Immediate Possession (as appropriate)
- Notifying VMR when possession is obtained
- Condemnation Proceedings
- Securing temporary construction easements
- Acquisition schedule
- All other real estate activities
- Demolition, where applicable

The City agrees to support VMR's requirement to maintain a Real Estate Tracking Schedule and will provide information updates monthly on parcels identified for either acquisition or easement needs. The information provided will include estimated costs, actual costs once acquisition or easement is achieved, and forecasted

completion of acquisition or right to access. VMR will use information thus provided for inclusion in a Project database for real estate tracking; a copy will be provided to the City monthly.

SECTION 10.0 CONSTRUCTION

10.1 Contract Documents

The Project will be constructed consistent with the Contract Documents developed under a design/bid/build procurement process. Tempe has carefully reviewed and agreed upon the design elements including drawings and specifications pursuant to which construction and related work will be performed with respect to the Project. These Contract Documents set forth the minimum standards required for the Project.

10.2 Project Sections

In addition to other support elements discussed herein, the Project has been split into five (5) distinct sections labeled Line Section 1, 2, 3, 4, and 5. Line Sections define contractual segments and have been established based on rationalized construction boundaries and are not delineated by City boundaries. Exhibit A-1 illustrates the various line sections, station locations, park and ride locations, and section lengths.

The line sections significant to the City of Tempe are a combination of Line Section 4, 5, and the Tempe Town Lake Bridge, for a total of 5.50 miles more or less. Exhibit A-2 illustrates the portion of the Project within the City limits.

10.3 VMR Construction Responsibilities

VMR will be responsible for the construction, including startup and testing, of the Project. This responsibility includes the procurement of materials, the selection of a contractor, construction management, scheduling, and all other duties associated with the construction of a major transportation infrastructure project.

VMR shall be the sole point of contact for Tempe during the construction of the Project. VMR recognizes that Tempe may have informal contact with the Contractor, but Tempe agrees that they will not provide direction to the Contractor. Input during the construction of the Project shall be directed through the VMR Director of Design and Construction, or designee, who will coordinate with the Contractor. VMR shall provide the Parties with an altemate VMR contact to ensure communication is maintained. VMR agrees that either the Director of Design and Construction or appropriate designee will have a presence at the Project site during all construction work or, alternatively, will have immediate availability by cellular telephone or pager.

In the event that any Party proposes a change order that would affect or potentially affect the interests of any other Party, the proposed change shall follow the procedures outlined in Section 7.3.

VMR shall perform quality assurance and quality control (QA/QC) functions for the Project. QA/QC activities shall conform to Federal Transit Administration Quality Assurance and Quality Control guidelines, VMR's Quality Assurance Manual, and Section 01440 of the Contract Documents.

VMR shall employ a Construction Administration Consultant to perform construction inspection on all Project elements through its Resident Engineers and inspectors. In addition, independent testing laboratories shall be employed through VMR's Contractors to test materials incorporated into the Project.

10.4 Tempe Construction Responsibilities

10.4.1 Tempe Oversight

Tempe may, but is not required to, perform an oversight function. In this regard, Tempe shall have access, for oversight activities, to the construction work performed in connection with the Project. Work performed in connection with the Project shall be subject to oversight by the Parties as follows: (i) as required pursuant to the applicable

building codes, ordinances, regulations, policies, or practices of the Party observing the Project work; (ii) when the work constitutes a Betterment or other element that is being financed by the Party observing the Project work; (iii) to confirm conformance of the work to the Contract Documents and other provisions of this Agreement; (iv) to monitor the Contractor's construction quality assurance methods, procedures, and personnel; and (v) for such other purposes as an interested Party may deem appropriate. Parties shall have a 24-hour right of access to all Project work sites as necessary to perform the above-described oversight activities including all on and off work site locations and storage locations. Each Party agrees to comply with VMR's site safety standards. Notwithstanding the foregoing, inspection of construction and installation of the Project shall be the primary responsibility of VMR. VMR shall perform quality control and quality assurance functions with respect to the Project. In addition, VMR shall retain auditors independent of the Contractor to oversee and monitor the Contractor's quality assurance program.

If, as a result of Tempe's observation of construction work as provided above, Tempe shall not unreasonably stop any phase of the work. Instead, such Party shall immediately contact VMR's Director of Design and Construction or designee. VMR shall resolve such Party concerns in a manner that is consistent with this Agreement. Nothing in this Section shall be interpreted to prohibit a Party from suspending construction work in emergency cases where such suspension is necessary to prevent or mitigate an imminent threat of death, bodily injury, or other serious damage to persons or property as determined by the Party in good faith.

10.4.2 Tempe Construction Tasks

Additionally, Tempe will be responsible for the following activities during the construction of the Project within the City:

- Tempe will operate the water system;

- Tempe will process all permits in a manner supportive of the Project needs
- Tempe will make all traffic signal controller adjustments

SECTION 11.0 COORDINATION OF ADJACENT PROJECTS

Tempe agrees that, except for renewals or extensions of existing licenses or permits, and renewals or extensions of existing use rights, Tempe shall not hereafter unreasonably grant licenses, permits or use rights and will coordinate with VMR's construction of the Project.

SECTION 12.0 BUDGET, COST DISTRIBUTION, AND REIMBURSEMENT

The Project will be funded with federal and local funds. Local tax revenue is to be contributed by the participating cities of Phoenix, Tempe, and Mesa. Federal 5309 New Starts funds are to be secured by the City of Phoenix as the Grantee, from the Federal Transit Administration. All other applicable federal funding sources including, but not limited to, Congestion Mitigation and Air Quality funds and Surface Transportation Program funds will be sought from the Maricopa Association of Govemments to reduce local funding requirements.

12.1 Work Breakdown Structure (WBS)

The WBS serves as the basis for budgeting, collecting, and reporting Project costs in accordance with local, federal, and Project reporting requirements. The WBS provides detailed visibility by FTA Activity Line Item (ALI) codes, each individual contract package, and ancillary Project requirements. The City recognizes that all cost collection and reporting shall adhere to the elements of the WBS. Additional codes outside the WBS are utilized to segregate work elements by regional, local, and funding source category.

12.2 Budget

The Project Budget will be evaluated and updated as the Project advances. Exhibit D-1 illustrates an estimate of Project costs and is subject to change. The Project Budget will be updated and reported to the VMR Board and the City in accordance with the Member Agreement.

12.3 Cost Distribution

The Member Agreement (Exhibit E), govern the allocation of costs for the Project among the participating cities. An estimate of cost distribution is illustrated in Exhibit D-2. Exhibit D-2 is an estimate and subject to change.

12.4 Betterments and Concurrent Projects

The Project Contract Documents include Betterments and Concurrent Projects. The City agrees to pay 100% of Betterment and Concurrent Project costs. A list and description of the Betterments and Concurrent Projects are provided in Exhibit D-3. Expenditures accrued for Betterments and Concurrent Projects will be processed with other Project costs but will not be reimbursed with federal 5309 New Starts funds allocated to the Project for other purposes.

12.5 City Administrative Staffing Costs

The City staffing costs associated with City support of the Project will be reimbursed as a Project expense. All other expenses incurred by the City shall be considered incidental and non-reimbursable by the Project.

The City shall submit invoices to VMR for review and approval monthly and shall designate one individual as the point of contact for invoice issues and clarifications.

The City's staffing reimbursement shall not exceed $6,797,000.

12.6 Cash Flow Methodology

VMR is responsible for the financial administration of the Project. Because VMR is not funded directly, VMR relies on federal and local funds for all Project costs. In its capacity as the Project lead agency, VMR will serve as a focal point for collecting all

Project costs, determining fiscal responsibility consistent with Exhibit E, requesting funds from the City, and paying invoices. Using federal funds solicited by COP, VMR will reimburse the City for the federal portion of funds used to cover the Project invoices.

VMR is responsible for the management of the budget, cash flow, and allocation requests from the Federal Transit Administration. All requests for federal funds will be routed through Phoenix. VMR will endeavor to seek prompt payment from COP once federal funds are available. Once VMR has access to federal funds, the City will be paid within 3 days.

In the event a cost distribution is challenged, the City shall pay the requested amount but will separately submit a request for clarification on the cost distribution. VMR shall have 30-days to respond and provide supporting documentation consistent with the By-Laws and the Project Budget Report.

In a very basic description, the cash flow for the Project is described in Figure 12-1.

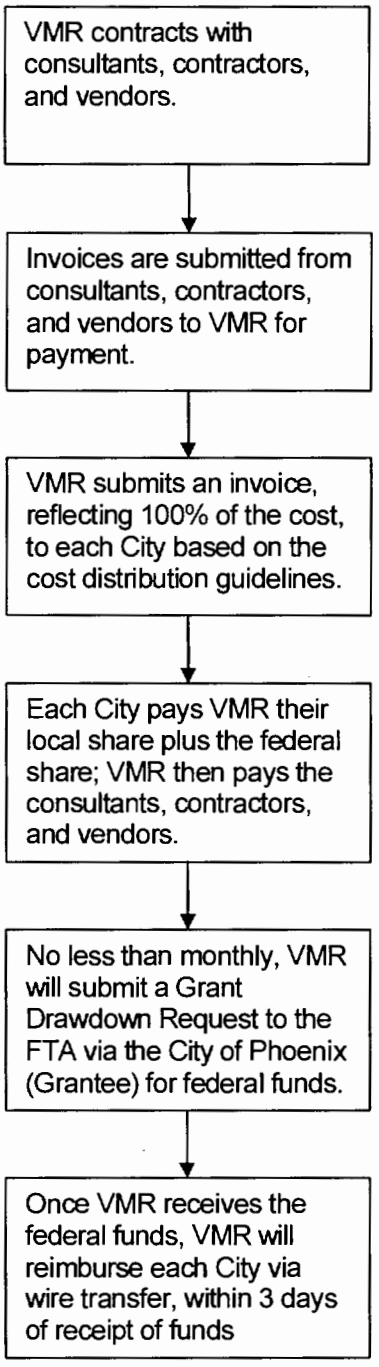
12.7 Audit Process

The City shall be entitled to review all VMR records upon reasonable notice and at reasonable times. This includes, but is not limited to, records of the Board, bookkeeping records, and records of operation (such as contracts).

SECTION 13.0 TESTING AND STARTUP

After construction and before entering into revenue service, VMR will test the light rail transit system. The testing and startup of the System can require the closure of intersections, the adjustment of traffic signals, and the hands-on training of emergency personnel among other tasks. The testing can occur at any time of the day and requires the coordination of many individuals.

Figure 12.1
Cash Flow Model



Tempe agrees to support VMR during the testing and startup period by providing as needed, staff for pre-test training and meetings, traffic signal adjustments, law enforcement for intersection closures, and/or allow emergency personnel to attend training for the emergency situations.

VMR agrees to provide Tempe with a testing and startup schedule 30 days in advance but not less than 2-weeks prior to testing and startup activities, identifying VMR's needs for Tempe.

SECTION 14.0 PERMITS AND COORDINATION

14.1 Use of Right of Way

Tempe agrees to grant to VMR certain non-exclusive rights to use Tempe right of way for light rail purposes, including the right to construct, operate, and maintain tracks, stations, system elements, and other improvements necessary for the System on that portion of the Project alignment constituting Tempe Right of Way. VMR's use of the Tempe Right of Way shall be upon such terms and conditions as set forth in a Public Way Use Agreement in substantially the form attached hereto as Exhibit B.

14.2 Permits and Fees

By executing this Agreement, Tempe agrees to grant all necessary authority, permission, and permits to enable VMR to construct the Project as set forth herein. All permits that Tempe issues to VMR, because the Project is capitally funded, will be no-fee permits. Tempe will grant to VMR both Building Permits from the Development Services Department to work outside the public Right of Way and construction permits from the Public Works Department for VMR to work in the Public Right of Way and provide on-site grading and drainage per City code. Development Services' permit type may include building, electrical, mechanical, and plumbing permits. Public Works' permit types may include trenching, water, sewer, storm drain, irrigation, paving, street lighting, traffic signal, hauling, and grading and drainage permits. Additionally, Tempe

will issue permits to VMR for any relocations or upgrades done as a part of the Project. Tempe and VMR acknowledge that the intent of this Agreement is to incorporate the majority of Tempe's requirements with respect to the permits VMR must obtain to construct the Project. However, before VMR begins construction, VMR shall apply for and Tempe agrees to not unreasonably withhold the above mentioned construction permits for each construction contract.

SECTION 15.0 ISSUE RESOLUTION

Any issue regarding the interpretation of any provision of this Agreement, or regarding any policy matter or the determination of an issue of fact, which dispute is not resolved at staff level, shall be referred to VMR's Chief Executive Officer and a representative designated by the City Manager. If, after good faith negotiations aimed at reaching an amicable solution, a dispute cannot be resolved, the issue shall be subject to a non-binding mediation process where both Parties would select jointly a neutral mediator. The mediator will hear both Parties' presentation regarding the dispute and will then make recommendations for resolution. If, after the mediation, the dispute remains unresolved, the dispute shall be presented to the VMR Board for resolution. If further not resolved, such dispute may then be brought before a court of competent jurisdiction in Maricopa County, Arizona.

SECTION 16.0 INSURANCE

Consistent with the By-Laws and as defined in the Member Agreement, the VMR Board shall determine what insurance coverage is appropriate to protect the Corporation, the Members, and the Project from risks concerning the Project and the Corporation shall obtain such insurance on behalf of the Members. In deciding what insurance coverage is appropriate, the Board will receive assistance and advice from the VMR Risk Management Committee, which is comprised of the Members' Risk

Manager, or designee. The Board may elect to self-insure for all or a portion of such risks.

SECTION 17.0 INDEMNIFICATION

Except for Claims arising solely and exclusively from the negligent or willful acts or omissions of the Indemnitee, VMR shall indemnify, defend, save and hold harmless the City of Tempe and its officers, officials, agents, and employees (hereinafter referred to as "Indemnitee") from and against any and all claims, actions, liabilities, damages, losses, expenses, and costs (including court costs, attorneys' fees, and costs of claim processing, primary loss investigation, and litigation) (hereinafter referred to as "Claims") for bodily injury or personal injury (including death), loss or damage to tangible or intangible property, and economic or financial loss of any character or any nature: (1) arising out of the work done in under the terms of this Agreement; or (2) caused, or alleged to be caused, in whole or in part, by the negligent or willful acts or omissions of VMR or any of their owners, officers, directors, agents, or employees, including "loaned" employees from the City of Tempe.

It is the specific intent of the Parties to this contract that the Indemnitee shall, in all instances except for loss or damage resulting from the sole and exclusive negligence of the Indemnitee, be indemnified against all liability, loss or damage of any nature whatever for on account of any injuries to or death of person or damages to or destruction of property belonging to any person, or economic or financial losses arising out of or in any way connected with the performance of this Agreement, regardless of whether or not the liability, loss or damage is caused by, or alleged to be caused in part by the negligence, gross negligence, or fault of the Indemnitee.

This indemnity includes, but is not limited to, any claim or amount arising out of or recovered under the Workers' Compensation Law or arising out of the failure of

VMR to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree.

It is agreed that VMR will be responsible for primary loss investigation, defense, and judgment costs. VMR agrees to waive all rights of subrogation against the Indemnitee.

SECTION 18.0 DEFAULT

A Party shall be deemed in default under this Agreement upon the failure of such Party to observe or perform any material covenant, condition or agreement on its part to be observed or performed, and the continuance of such failure for a period of thirty (30) days after the giving of written notice by the other Party. Such notice shall specify the failure and request that it be remedied, unless the Party giving such notice agrees in writing to an extension of such time period prior to its expiration. However, if the failure stated in such notice cannot be corrected within the applicable period, it shall not give rise to a default hereunder if corrective action is instituted within the applicable period and diligently pursued until such failure is corrected. In the event of a default hereunder, the non-defaulting Party shall have a breach of contract claim and remedy against the other in addition to any other remedy provided or permitted by law, provided that no remedy which would have the effect of amending any provisions of this Agreement shall become effective without the formal amendment of this Agreement as set forth in Section 24.0.

SECTION 19.0 NOTICES

Any notice, consent, or other communication ("NOTICE") required or permitted under this Agreement shall be in writing and either delivered in person, deposited in the United States mail, postage prepaid, registered or certified mail, return receipt requested, or deposited with any commercial air courier or express service addressed as follows:

If intended for VMR:

Chief Executive Officer
Valley Metro Rail, Inc.
411 N. Central Avenue, Suite 200
Phoenix, Arizona 85004
Telephone: (602) 534-1807

If intended for City of Tempe:

City Manager
City of Tempe
51 E. Fifth Street
Tempe, Arizona 85281
Telephone: (480) 350-8221

Notice shall be deemed received at the time it is personally served or, on the second day after its deposit with any commercial air courier or express service or, if mailed, ten (10) days after the notice is deposited in the United States mail as above provided. Any time period stated in a notice shall be computed from the time the notice is deemed received. Either party may change its mailing address, or the person to receive notice by notifying in writing the other party as provided in this section.

SECTION 20.0 NON-WAIVER

No covenant or condition of this Agreement may be waived unless done so in writing. Forbearance or indulgence by any Party in any regard whatsoever shall not constitute a waiver of the covenants or conditions to be performed by any other Party. A Party's failure to comment and/or object with respect to such Party's review of Project Submittals or any other review called for or permitted pursuant to this Agreement shall not be deemed to be a waiver of any other rights such Party may have with respect to this Agreement, including the right to enforce the Plans and Specifications.

SECTION 21.0 SEVERABILITY

If any provision of this Agreement shall be held or deemed to be or shall, in fact, be illegal, inoperative or unenforceable, the same shall not affect any other provision or provisions herein contained or render the same invalid, inoperative or unenforceable to any extent whatever.

SECTION 22.0 GOVERNING LAW

This Agreement shall be governed by the laws of the State of Arizona, both as to interpretation and performance. It shall be enforced only in a court of competent jurisdiction in Maricopa County, Arizona.

SECTION 23.0 NO THIRD PARTY BENEFICIARIES

There are no intended third Party beneficiaries to this Agreement. It is expressly understood that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the Parties, and nothing contained in this Agreement shall give or allow any claim or right of action by any third person. It is the express intention of the Parties that any person other than the Parties who receives benefits under this Agreement shall be deemed an incidental beneficiary only.

SECTION 24.0 AMENDMENT

This Agreement may not be amended, enlarged, modified or altered except through a written instrument that is signed by all the Parties. To the extent of any conflict between the provisions of this Agreement and the provisions of any later agreements, the later agreements shall be controlling.

SECTION 25.0 POLICE POWER

The Parties acknowledge the right vested in Tempe pursuant to general law to exercise its police powers for the protection of the health, safety and welfare of their

constituents and their properties. Nothing in this Agreement shall be construed as precluding any Party from exercising such powers in connection with the Project.

SECTION 26.0 INTERLOCAL COOPERATION ACT REQUIREMENTS

The Parties are authorized to enter into this Agreement by the Joint Exercise of Powers Act (A.R.S. Section 11-952) and the Urban Mass Transportation Systems Act (A.R.S. Section 40-1152).

SECTION 27.0 FUNDING OBLIGATIONS

Any obligations of Tempe to pay money or incur costs under this LRT Agreement shall be subject to appropriation of sufficient funds for such purpose. Except as otherwise provided herein, and in the By-Laws (Exhibit E) of VMR, this LRT Agreement shall not be construed to obligate any Party to make financial contributions toward the Project. The fiscal obligations for which Tempe is responsible are detailed in Exhibit D.

SECTION 28.0 SURVIVORSHIP

Provisions of this Agreement which by their nature are intended to continue in force beyond the Term of this Agreement will survive any termination of this Agreement.

SECTION 29.0 INCORPORATION OF EXHIBITS

This Agreement in its entirety includes Exhibits A through G, all of which are incorporated herein and made a part hereof. The Exhibits of this Agreement are as follows:

Exhibit A	Project Alignment (Contractual)
Exhibit B	Public Way Use Agreement (Reference)
Exhibit C	Public Involvement Plan (Reference)
Exhibit D	Budget and Cost Distribution (Contractual)
Exhibit E	Member Agreement (Reference)
Exhibit F	Real Estate Acquisition Management Plan (Reference)

Exhibit G Light Rail Maintenance (Reference)

SECTION 30.0 CONFLICT OF INTEREST

This Agreement is subject to Arizona revised Statutes, Section 38-511. This Agreement may be canceled if any person significantly involved in initiating, negotiating, securing, drafting or creating this Agreement on behalf of Tempe is an employee, consultant, or agent of any other party to this Agreement.

IN WITNESS WHEREOF, the Parties have each executed this Agreement as of the date first set forth above.

VALLEY METRO RAIL, INC
Richard J. Simonetta, Chief Executive Officer

By: _____

APPROVED AS TO FORM

By: _____

Counsel for Valley Metro Rail, Inc.

CITY OF TEMPE
Neil G. Giuliano, Mayor

By: _____

APPROVED AS TO FORM

By: _____

City Attorney for the City of Tempe

ATTEST

By: _____

City Clerk